theIASHub

FEBRUARY

10

CRUX 10

10 News. 10 Sources. One Place

THE HINDU | ET | BS | TOI | The Indian EXPRESS | livemint | pib | DownToEarth — FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH | Science Reporter | विज्ञान एवं प्रौद्योगिकी मंत्रालय MINISTRY OF SCIENCE AND TECHNOLOGY



Table of Contents

1. Life Insurance Corporation
2. Nord Stream Pipelines
3. Digital Payments Utsav
4. RDSS
5. NESIDS
6. National Security Advisor
7. Adjournment Motion
8. Lithium
9. Ring on a Dwarf Planet
10. Probiotic Bacteria

BUSINESS STANDARD

Page 1

LIFE INSURANCE CORPORATION

(Syllabus: GS Paper 3 - Economy)

LIC's net profit surges to ₹6,334 crore in Q3

SUBRATA PANDA
Mumbai, 9 February

State-owned Life Insurance Corporation (LIC) reported a manifold increase in its net profit in the December quarter (Q3) of financial year 2022-23 (FY23), aided by a transfer of ₹5,670 crore from non-participatory to shareholders accounts. Its net profit in Q3 stood at ₹6,334.19 crore, compared with ₹234.91 crore in the year-ago period.

In the nine-month period (April-December FY23), the corporation's profits soared to ₹22,970 crore, compared with ₹1,672 crore a year ago. The huge jump was because of the transfer of ₹19,941 crore to shareholder accounts over the last four quarters.

Turn to Page 6

ROBUST NUMBERS

	9MFY22	9MFY23	YoY (%)
Total premium income (₹cr)	283,673	342,244	20.65
Profit after tax (₹cr)	1,672	22,970	NA
Assets under management (₹cr)	40,12,172	44,34,940	10.54
Value of new business (VNB) (₹cr)	NA	5,478	NA
VNB margin (%)	NA	14.6	NA
No. of policies sold	12,648,184	12,890,843	1.92

Source: LIC



Page 2

HINDALCO NET FALLS 63% ON INPUT COST PRESSURE

ZOMATO Q3 NET LOSS WIDENS TO ₹347 CRORE

Context: State-owned **Life Insurance Corporation (LIC)** reported a manifold increase in its net profit in the December quarter (Q3) of financial year 2022-23 (FY23), aided by a transfer of ₹ 5,670 crore from non-participatory to shareholders accounts.

Life Insurance Corporation

- **About**: LIC is a government-owned insurance and investment company arising from the Life Insurance Act of India.
  - It is a **statutory body.**
  - LIC is **fully owned by the government.**
- **Origin**: The Life Insurance Corporation of India was established on 1 September 1956, when the Parliament of India passed the **Life Insurance of India Act,** nationalizing the insurance industry in India.
- **Nodal Ministry:** It is under the ownership of Government of India and administrative control of the **Ministry of Finance.**
- **HQ** : Mumbai
- **Objectives**: Its aim is to **provide citizens with a higher return on economic security** through services and products than most other investment players on the market, thereby helping them build a particular quality of life and providing economic development.

THE HINDU Page 15

NORD STREAM PIPELINES

(Syllabus: GS Paper 3 - Infrastructure)

'Those behind gas pipeline blasts must be punished'

Reuters
MOSCOW

The Kremlin said on Thursday the world should know the truth about who sabotaged the Nord Stream gas pipelines and those responsible should be punished.

In a blog post, Pulitzer Prize-winning investigative journalist Seymour Hersh cited an unidentified source as saying that the U.S. navy divers had destroyed the pipelines with explosives on the orders of President Joe Biden.

The White House dismissed them as "utterly false and complete fiction". Norway's Foreign Ministry said the allegations were "nonsense".

The Kremlin said Mr. Hersh's blog post deserved more attention and that he was surprised it had not been covered more fully by Western media.

Context: The Kremlin said the world should know the truth about who sabotaged the **Nord Stream** gas pipelines and that those responsible should be punished after an investigative journalist said U.S. divers blew them up at the behest of the White House.

Nord Stream pipelines

- **Nord Stream 1 subsea pipeline:** Nord Stream 1 was completed in 2011 and runs from **Vyborg in Leningrad (Russia) to Lubmin near Greifswald, Germany.**
  - **Majority ownership**: The **Russian state-owned gas compan**y Gazprom has a majority ownership in the pipeline
  - According to Bloomberg: 40% of Europe's pipeline gas came from Russia before the war(now 9%).
- **Nord Stream 2**: This is a **1,200-km pipeline** that runs from Ust-Luga in Russia to Greifswald in Germany through the Baltic Sea.
  - It will carry 55 billion cubic meters of gas per year.
  - The Nord Stream crosses the **Exclusive Economic Zones (EEZs)** of several countries including: Russia, Finland, Sweden, Denmark and Germany.
  - Territorial waters of: Russia, Denmark and Germany.



PIB FEB 10

DIGITAL PAYMENTS UTSAV
(Syllabus: GS Paper 3 - Infrastructure)

Shri Ashwini Vaishnaw launches 'Digital Payments Utsav' to Promote Digital Transformation

Context: The **Minister for Electronics & Information Technology**, Communications and Railways, launched the '**Digital Payments Utsav'**, a comprehensive campaign aimed at promoting digital payments across India.

Key Points

- The "**Digital Payments Utsav"** is an extraordinary campaign that will showcase India's journey of digital transformation, with a series of events and initiatives to be held from 9th February to 9th October 2023.
- The focus of the campaign will be on **promoting digital payments** in the country, especially in the cities of Lucknow, Pune, Hyderabad, and Bengaluru, as part of the **G20 Digital Economy Working Group (DEWG) event.**
- The event culminated with the flag-off of the **Digital Payment Sandesh Yatra,** which will tour the country to educate citizens about digital payments and its security.
- The yatra is an **important aspect of the Digital Payments Utsav** and will help to increase awareness and adoption of digital payments in India.
- The launch of the Digital Payments Utsav marks a major milestone in the government's efforts to **promote digital payments and drive digital transformation in India.**
- The comprehensive campaign is expected to **bring together various stakeholders**, including the government, industry, and citizens, to drive the growth of the digital economy and promote financial inclusion.

PIB FEB 10

REVAMPED DISTRIBUTION SECTOR SCHEME

(Syllabus: GS Paper 3 - Economy & Infrastructure)

Government of India launches Revamped Distribution Sector Scheme (RDSS) to reduce the Aggregate Technical & Commercial (AT&C) losses to pan-India levels

Context: Government of India launched the **Revamped Distribution Sector Scheme (RDSS)** with an outlay of Rs. 3,03,758 crore and estimated GBS from Central Government of Rs. 97,631 crore for the duration of 5 years i.e. from (FY 2021-22 to FY 2025-26).

Key Points

- The Scheme aims to reduce the **Aggregate Technical & Commercial (AT&C) losses** to pan-India levels of 12-15% and Average Cost of Supply (ACS)-Average Revenue Realised (ARR) gap to zero by 2024-25.
- The Scheme has two major components:
  - Part 'A' – Financial support for **Prepaid Smart Metering & System Metering** and upgradation of the Distribution Infrastructure.
  - Part 'B' **– Training & Capacity Building** and other Enabling & Supporting Activities.
- **Financial assistance to DISCOMs** is provided for upgradation of the Distribution Infrastructure and for Prepaid Smart Consumer Metering & System Metering based on meeting pre-qualifying criteria and achieving basic minimum benchmark in reforms.
- **Schemes of Integrated Power Development Scheme (IPDS), Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) along with Prime Minister's Development Package (PMDP)-2015** for the erstwhile State of Jammu & Kashmir are being subsumed in this scheme to be implemented as per their extant guidelines and under their existing terms & conditions.
- **No new projects** will be sanctioned under these schemes but projects already sanctioned will be eligible to receive funds up to 31st March 2022 under RDSS.
  - However, projects sanctioned for Ayodhya, Uttar Pradesh under IPDS and projects sanctioned under PMDP 2015 will get funds till 31st March 2023.
- So far, **Sixteen (16) meetings of the Monitoring Committee of RDSS** have been convened, wherein, Action Plans and DPRs of 46 Discoms (28 States/UTs) have been approved where ~20.46 crores pre-paid smart consumers meters, ~54 Lakh smart DT meters and ~1.98 Lakh smart feeder meters have been sanctioned.

PIB FEB 10

NESIDS

(Syllabus: GS Paper 3- Infrastructure)

Rs. 3392.98 crore sanctioned for 145 projects under North East Special Infrastructure Development Scheme (NESIDS) from 2017-23.

Context: In all, 145 projects have been approved/sanctioned for a total cost of Rs.3392.98 crore under **North East Special Infrastructure Development Scheme (NESIDS)** since inception i.e w.e.f. 2017-18 to 2022-23 (as on 09-02-2023).

North East Special Infrastructure Development Scheme (NESIDS)

- **About**: The NESIDS was sanctioned by the Government of India to focus on projects relating to **infrastructure creation** concerning water supply, power and connectivity, and thereby enhancing tourism.
- **Nodal Ministry**: NESIDS is being implemented by the Union **Ministry of Development of the North-East Region (MoDoNER).**
- **Funding**: NESIDS is a central sector scheme with **100% financial assistance from the Union Government.**
- **Financial Assistance and Focus Areas**: NESIDS is a **central sector scheme** (100% funding by central government). Under NESIDS, financial assistance is provided:
  - To **enhance tourism** through physical infrastructure projects relating to water supply, power and connectivity; and
  - To **upgrade social infrastructure** for primary and secondary education and health.
- **Key Benefits:**
  - The assets to be created under the new scheme of NESIDS will s**trengthen health care and education facilities** in the region
  - NESIDS will also **encourage tourism** thereby employment opportunities for local youth.
  - The scheme will **act as a catalyst** in the overall development of the region in the years to come.

INDIAN EXPRESS

Page 1

NATIONAL SECURITY ADVISOR

(Syllabus: GS Paper 2 - Polity & Governance)

Doval meets Putin, both agree to keep strategic ties going

SHUBHAJIT ROY
NEW DELHI, FEBRUARY 9

A FORTNIGHT before Russia's invasion of Ukraine completes a year, National Security Advisor Ajit Doval met Russian President Vladimir Putin in Moscow and they agreed to continue work towards implementing the India-Russia strategic partnership.

The Indian embassy in Moscow, in a Twitter post Thursday, said, "NSA Ajit Doval called on HE President Putin. Wide-ranging discussion on bilateral and regional issues. Agreed to continue work towards implementing the India-Russia strategic partnership."

This is the NSA's second visit to Russia since the Ukraine war began — he was there in August last year.

The Kremlin said President Putin met with heads of delegations taking part in the multilateral consultations on Afghanistan.

On Wednesday, Doval had attended the fifth multilateral meeting of Secretaries of Security Councils/NSAs on Afghanistan which was hosted by Russia.

Putin told the visiting NSAs: "I know that this meeting has become a tradition and is devoted to a very important issue — the situation in Afghanistan. Obviously, there is a lot of potential for conflict in the world today. There are many conflicts here, not far from Russia, including on the Ukrainian track."

"We are well aware and we realise this perfectly well, but this does not reduce the significance of the situation in Afghanistan. This has always been important for us and now

CONTINUED ON PAGE 6

Context: A fortnight before Russia's invasion of Ukraine completes a year, **National Security Advisor met Russian President** in Moscow and they agreed to continue work towards implementing the India-Russia strategic partnership.

National Security Advisor

- **About**: The National Security Advisor (NSA) is the **primary advisor to the Prime Minister of India.**
  - He also presides over the **National Security Council (NSC).**
    - The NSC is the apex agency in the country **handling internal and external security,** conventional and non-conventional defence, military affairs, counter-insurgency, space and high technology, economy, counter-terrorism and environment.
    - The NSC is **headed by the Prime Minister and the NSA is its Secretary.**
    - It was **formed in 1998**, where all aspects of national security are deliberated upon.
    - NSC operates within the executive office of the PM, liaising between the government's executive branch and the intelligence services.
    - The Ministers of **Home Affairs, Defence, External Affairs and Finance** are its members.
- **Origin**: All NSAs appointed since the inception of the post in **1998** belong to the either Indian Foreign Service or to the Indian Police Service, and serve at the discretion of the Prime Minister of India.
- **Role**: The National Security Advisor (NSA) is tasked with **regularly advising the Prime Minister of India** on all matters relating to internal and external threats and opportunities to India, and oversees strategic and sensitive issues on behalf of the Prime Minister.
  - The NSA of India also serves as the Prime Minister's **Special Interlocutor** with China as well as the envoy to Pakistan and Israel on security affairs.
  - The NSA receives **all intelligence (RAW, IB, NTRO, MI, DIA, NIA) reports** and co-ordinates them to present before the Prime Minister.
  - NSA is assisted by the **Deputy National Security Advisors (Deputy NSAs).**
  - The policy group is the **main mechanism for inter-ministerial coordination** and integration of inputs in forming national security policies.
  - The **group members** include the NITI Aayog vice chairman, the cabinet secretary, the three military chiefs, the Reserve Bank of India governor, the foreign secretary, home secretary, finance secretary and the defense secretary.

TIMES OF INDIA

Page 15

ADJOURNMENT MOTION

(Syllabus: GS Paper 2 - Polity & Governance)

Congress member's adjournment motion disallowed

Swati.Mathur@timesgroup.com

New Delhi: With the Lok Sabha secretariat expunging portions of Congress MP Rahul Gandhi's speech in which he linked sudden rise of the Adani group to BJP assuming office in 2014, the opposition party tried to deploy new means to squeeze in the issue into the House proceedings.

Congress' Virudhnagar MP Manickam Tagore moved an adjournment motion in Lok Sabha seeking "details of the PM's foreign travels with Adani", borrowing from the questions Gandhi had raised and which were not removed from the official records of the House proceedings.

Through his notice that demanded "Discussion on PM's foreign travel with industrialist Gautam Adani and the benefit the group received in foreign tenders", Tagore sought to know details of the total number of times the PM travelled with Adani on foreign tours, the number of times the businessman joined the PM later, details of the number of times Adani visited the country concerned immediately after the PM's visit, and the number of times his companies landed contracts after the PM's visits. Tagore's notice said the House should also discuss the donations made by Adani to BJP in the last two decades.

The notice, along with another moved by Manish Tewari demanding a discussion on China, were not allowed by the Speaker on Thursday.

The PM, while responding to the discussion on the Motion of Thanks to the President's Address, had steered clear of the Adani subject, but attacked the opposition, and Congress in particular, while referring to the UPA regime as the 'Lost Decade' for India.

Tewari's adjournment motion said that since April 2020, China has engaged "in what can only be described as a steady land grab" and it has all the while been building significant infrastructure, including bridges, roads and accommodation for its troops, along LAC.

Restore expunged Rahul speech: Cong

Congress has protested the deletion of parts of Rahul Gandhi's speech made in the Lok Sabha on the Adani row, with the party urging the Speaker that the address be restored as delivered. It said the speech, after expunging of a major portion of the remarks, has become unintelligible. TNN

Context: Congress MP moved an **adjournment motion** in Lok Sabha seeking "details of the PM's foreign travels with Adani", borrowing from the questions Congress had raised and which were not removed from the official records of the House proceedings.

Adjournment Motion

- **About**: It is regarded as an **extraordinary device** because it interrupts the normal business of the House and needs the support of 50 members to be admitted in the Parliament.
- **Objective**: To draw the **attention of the House** to a recent matter of urgent public importance having serious consequences.
- **Censure against the Government**: As it involves the **element of censure against the government** hence **Rajya Sabha is not allowed** to make use of this option.
- **Admissibility**: The matter raised is **definite, factual, urgent and of public importance.**
    - It relates to a specific matter of recent occurrence.
    - It does not raise a question of privilege.
    - It does not revive discussion on a matter already discussed in the same session.
    - It does not relate to a matter which is sub-judice.
    - It does not raise any question which under the Constitution or Rules can be raised only on a distinct substantive motion.
    - The matter involves direct or indirect responsibility of the Government of India.

LIVE MINT

Page 2

LITHIUM

(Syllabus: GS Paper 1 - Geography)

Lithium found in J&K's Reasi district

Mihir Mishra
mihir.mishra@livemint.com
NEW DELHI

In a major boost to India's efforts to become self-sufficient in electric vehicle batteries, the Geological Survey of India (GSI) has discovered lithium in Reasi district of Jammu and Kashmir.

This is the first significant discovery of lithium deposits in India after a small reserve in Karnataka—the outcome of the mines ministry's new focus on rare earth metals.

"We have re-oriented our exploration measures towards critical and strategic minerals and this discovery is a vindication of our efforts," Vivek Bhardwaj, secretary, ministry of mines, said to a query by *Mint*.

Since lithium is a key component of batteries used in electric vehicles, the government is searching for rare metal reserves both within and outside the country.

Apart from the GSI, a consortium of three public-sector companies—National Aluminium Company, Hindustan Copper and Mineral Exploration Corp—is working to provide a vehicle for research and development for recycling, acquisition and joint manufacturing of lithium-ion batteries.

Lithium reserves are concentrated in Argentina, Bolivia and Chile. China controls 75% of lithium refining.

Context: In a major boost to India's self-sufficiency in electric vehicle batteries, the Geological Survey of India (GSI) has discovered lithium for the first time in **Reasi district of Jammu & Kashmir (UT).**

Key points

- This is the first significant mineral discovery in India, as previously only a small reserve had been **discovered in Karnataka.**
- Since lithium is a **key component of batteries** used in electric vehicles, the government is searching for rare metal reserves both within and outside the country.
- Lithium reserves are **concentrated in the lithium triangle in South America** – Argentina, Bolivia & Chile, with 50% of the deposits concentrated in these regions. China, meanwhile, has the lead over other countries and China controls 75% of Lithium refining.

Lithium

- **About**: It is a **soft, silvery-white metal.** Under standard conditions, it is the lightest metal and the lightest solid element.
  - It is **highly reactive and flammable,** and must be stored in mineral oil. It is an alkali metal and a rare metal.
- **Key Characteristics and Properties:**
  - It has the **highest specific heat capacity** of any solid element.
  - **Lithium's single balance electron** allows it to be a good conductor of electricity.
  - It is **flammable** and can even explode when exposed to air and water.
- **Uses**: Lithium is a **key element for new technologies** and finds its use in ceramics, glass, telecommunication and aerospace industries.
  - **The well-known uses of Lithium are in** Lithium ion batteries, lubricating grease, high energy additive to rocket propellants, optical modulators for mobile phones and as convertor to tritium used as a raw material for thermonuclear reactions i.e. fusion.
- **Lithium in India:** Researchers at the **Atomic Minerals Directorate (under India's Atomic Energy Commission)** have estimated lithium reserves of 14,100 tonnes in a small patch of land surveyed in **Southern Karnataka's Mandya district recently.**
- **Countries with Largest Reserves**: Chile> Australia> Argentina

DST

FEB 10

PROBIOTIC BACTERIA

(Syllabus: GS Paper 3 - Sci & Tech)

Newly discovered next-generation probiotic bacteria can promote longevity and healthy aging

Context: A next-generation **probiotic bacteria discovered** in fermented food from the North East of India has been found to promote longevity and healthy aging.

Key Points

- The **probiotic or food prepared** with it may delay the onset of age-associated diseases in humans, such as inflammation, decline in cognitive ability, and increased immunity in elderly people.
- The recent advances in medical science have increased life expectancy and led to the rapid growth of the aging population.
- The United Nations predicts that one in every eleven people will be older than the age of 65 by 2050.
- This raises **concerns about the health and medical costs of this aging population.** Scientists are looking for natural and dietary solutions to maintain the health of this population.
- One of the bacterium, **Lactobacillus plantarum JBC5 (LPJBC5)**, isolated from curd and generally found in fermented milk and vegetable products, passed all the tests mandated by the Indian Council of Medical Research (ICMR) to qualify as probiotics.
- It showed **health-promoting effects** in a popular worm model, Caenorhabditis elegans, which is generally used for aging research.
- This probiotic bacterium caused a 27.81% increase in the lifespan of the model organism C. elegans through a gene called upregulating skinhead-1 (skn-1) activated via the conserved a cellular pathway against stress called p38 MAPK signalling cascade accompanied by the hallmarks of healthy aging.
- It **improved physical activity and reduced accumulation of aging pigment lipofuscin,** activated transcription factor skn-1 gene, upregulated the expression of antioxidative, thermo-tolerant, and anti-pathogenic genes that conferred resistance against abiotic and biotic stresses such as oxidative, heat, and pathogenic infections.
- It also **enhanced learning and memory** through upregulation of genes involved in serotonin signaling (ser-1, mod-1, and tph-1), reduced fat accumulation by reducing the expression of genes encoding key substrates and enzymes of fat metabolism (i.e., fat-5 and fat-7), improved gut integrity through upregulating the expression of intestinal tight junction protein ZOO-1 and reduced the production of reactive oxygen species and improved the mitochondrial function.
- These effects i**nduced the reduction of apoptosis** and induced healthy aging in worms.

DTE

FEB 10

RING ON A DWARF PLANET

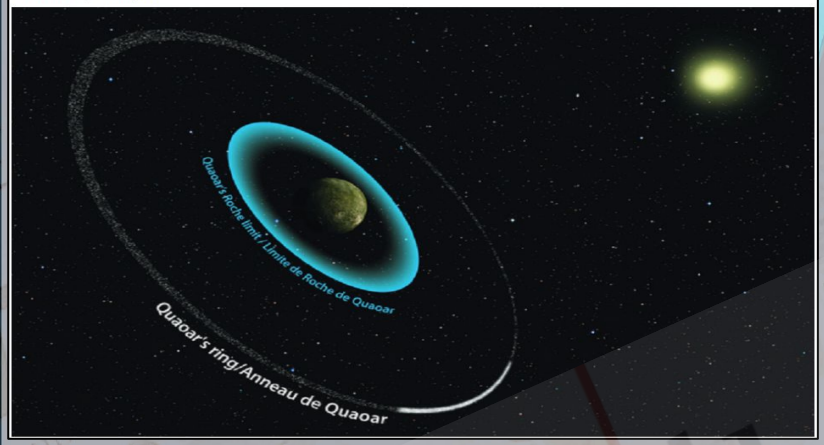
(Syllabus: GS Paper 3 - Sci & Tech)

A mysterious ring on a dwarf planet is puzzling astronomers

Quaoar, which revolves the Sun beyond Neptune, has a ring that is too far out according to current theories

NEXT NEWS >

By Rohini Krishnamurthy
Published: Thursday 09 February 2023



Dwarf Planets in the Solar System

In 2006, the organization responsible for classifying celestial bodies, the International Astronomical Union (IAU) decided that a new class of objects was needed. Pluto, considered a planet since its discovery in 1930, was reclassified into the new "dwarf planet" category. To date, five dwarf planets have been found, although some astronomers expect there may be as many as 50 in the solar system.



	ERIS	PLUTO	HAUMEA	MAKEMAKE	CERES
Year of discovery	2003	1930	2003	2005	1801
Diameter (mean)	1,445 miles 2,326 km	1,430 miles 2,302 km	892.3 miles 1,436 km	882 miles 1,420 km	591.8 miles 952.4 km
Orbital period (Earth years)	561.4	247.9	281.9	305.34	4.6
Distance from sun (times Earth's distance)	68	39.5	43.1	45.3	2.8
Orbital inclination (degrees)	46.9	17.14	28.2	29	10.59
Rotation period	25.9 hours	6.39 Earth days	3.9 hours	22.5 hours	9.1 hours
Moons	1	5	2	0	0

Context: Astronomers are puzzled by a dwarf planet in our solar system - about half the size of Pluto - with **unusual rings,** according to a new study.

- The dwarf planet **orbits the Sun beyond Neptune.**

Key Points

- The **rings of Quaoar** are positioned at a distance of over seven planetary radii - much further away from other planets that possess rings, noted the study published in Nature journal.
- **Saturn's main rings**, in contrast, are found within three planetary radii. The planetary radius is the distance between a planet's centre and its surface.
- **Planetary rings** possess small chunks of ice and other materials that orbit a larger object.
- Only **Saturn, Jupiter, Uranus and Neptune,** including two other minor planets, **Chariklo and Haumea,** are known to possess rings.
- They found a dip in **brightness as Quaoar blocked light** from a background star. Additionally, they found two more dips.
- The two dips were on either side of the main dip caused by **Quaoar**. So, this means there must be a ring system surrounding the planet.
- Using the **time difference between the two dips** and the main dip, the researchers estimated the distance of the rings from the planet.
- The **rings' position contradicts the 'Roche limit'**, which is the outer limit of where ring systems were thought to be able to survive.

Secure Top Rank with theIAShub Courses

Prelims 2023 Courses

01 Prelims Crash Course Score Enhancement Program (SEP)

02 INA Current Affairs (Prelims)

03 TACKLE - Prelims Test Series

04 Geography - Prelims Crash Course

Quality Enrichment Courses (Mains 2023)

01 Quality Enrichment Program (QEP)

02 Science of Answer Writing (SAW)

Prelim Cum Mains 2024 Courses

01 NEEV GS Foundation 2024/25

02 INA Current Affairs Pre Cum Mains - 2024

FREE Download PDF

Login to theiashub.com

- Aaj Ka Quality Enrichment (Toppers' Favourite PDF)
- News-CRUX-10 (10 News. 10 Sources. One Place)
- Monthly Editorials (The Hindu & Indian Express)
- Daily Quiz (Prelims)
- Government Schemes & Ministry Wise Year End Review
- Free Enrichment PDFs (Tailor Made Crisp Study Material)



Log On To Our Unique
Free Answer Writing Sessions with Toppers (FAST) Portal
& Start Practicing!

SCAN HERE

9560082909

t.me/theiashub

/mkyadav

www.theiashub.com

www.theiashub.com